

Diagnostic imaging of trabecular bone microstructure for oral implants: a literature review

Type: Article

Abstract:

Several dental implant studies have reported that radiographic evaluation of bone quality can aid in reducing implant failure. Bone quality is assessed in terms of its quantity, density, trabecular characteristics and cells. Current imaging modalities vary widely in their efficiency in assessing trabecular structures, especially in a clinical setting. Most are very costly, require an extensive scanning procedure coupled with a high radiation dose and are only partially suitable for patient use. This review examines the current literature regarding diagnostic imaging assessment of trabecular microstructure prior to oral implant placement and suggests cone beam CT as a method of choice for evaluating trabecular bone microstructure. *Dentomaxillofacial Radiology* (2013) 42, 20120075. doi: 10.1259/dmfr.20120075

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